

**Listing of Claims:**

25. (previously presented) An astaxanthin mutant *Phaffia rhodozyma* producing more astaxanthin than naturally occurring *Phaffia rhodozyma*, said mutant producing more than 700 micrograms of astaxanthin per gram of dry yeast per six-day culture in YM medium, wherein the amount of astaxanthin is determined by measuring the absorbance at 474 nanometers of a petroleum ether extract of *Phaffia rhodozyma* using a 1%.(w/v) extinction coefficient in a one centimeter cuvette of 2100.

26. (previously presented) The mutant yeast of claim 25, wherein said mutant yeast produces more than 900 µg of astaxanthin per gram of dry yeast.

27. (previously presented) The mutant yeast of claim 26, wherein said mutant yeast produces more than 1100 µg of astaxanthin per gram of dry yeast.

28. (previously presented) The mutant yeast of claim 27, wherein said mutant yeast produces more than 1400 µg of astaxanthin per gram of dry yeast.

29. (previously presented) The mutant yeast of claim 28, wherein said mutant yeast produces more than 1700 µg of astaxanthin per gram of dry yeast.

30. (previously presented) The mutant yeast of claim 25, wherein said mutant yeast produces astaxanthin at a level at least two times that of naturally occurring *Phaffia rhodozyma*.

31. (previously presented) The mutant yeast of claim 30, wherein said mutant yeast produces astaxanthin at a level at least three times that of naturally occurring *Phaffia rhodozyma*.

32. (previously presented) The mutant yeast of claim 31, wherein said mutant yeast produces astaxanthin at a level at least four times that of naturally occurring *Phaffia rhodozyma*.

33. (previously presented) The mutant yeast of claim 32, wherein said mutant yeast produces astaxanthin at a level at least five times that of naturally occurring *Phaffia rhodozyma*.

34. (previously presented) The mutant yeast of claim 33, wherein said mutant yeast products astaxanthin at a level at least six times that of naturally occurring *Phaffia rhodozyma*.